Indicator 33. Degree of Recycling of Forest Products

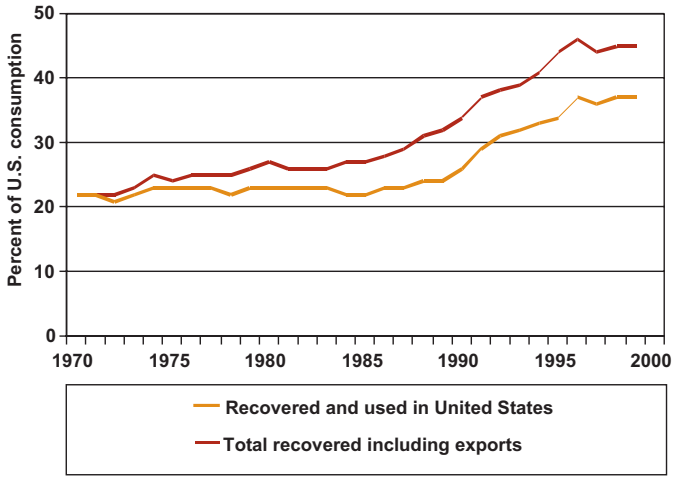

Figure 33.1. Percent of U.S. paper consumption recovered (including exports) and percent used in domestic production, 1970–1999.

What Is the Indicator and Why Is It Important?

Paper and solidwood products may be recovered and recycled into new products or they may be recovered and used for energy. Both forms of recovery have an effect on timber harvest, energy use, and emissions associated with production, product consumption, trade, and waste disposal. High levels of recovery and recycling may hold down timber harvest that may aid in forest conservation. They may also hold down prices for timber that would help support forest management. The desirability of higher levels of recovery and recycling may be judged in part by their effects on providing environmental management outcomes (forests, emissions, waste), support for communities, and providing consumption values.

What Does the Indicator Show?

U.S. recovery of paper and solidwood for use in making products and in making energy has increased in recent decades. The United States consumed 105 million tons of paper and paperboard in 1999, up from 56 million tons in 1970, and recovered 45 percent in 1999 for recycling, up from 22 percent in 1970. In comparison, consumption and recovery for all developed countries in 1999 was 252 million tons and 43 percent. An increasing fraction of recovered paper has been exported, 18 percent in 1999, up from 3 percent in 1970. The amount of recovered paper used per unit of U.S. paper and paperboard production has increased from 24 percent in 1970 to 39 percent in 1999. Some solidwood products are also recovered and recycled from wooden pallets, construction waste, demolition waste, and municipal solid waste. In 1998, 665 million wooden pallets were produced, and 250 million were recycled. Those amounts are up from 355 million pallets produced, and 66 million recycled in 1992. In 1998, an estimated 9, 26, and 12 million tons of wood waste were generated from construction, demolition waste, and municipal solid waste, respectively. Much of that waste is used for products, is burned, or is not useable. The estimated fractions available for use are 76 percent, 34 percent, and 46 percent, respectively.

In addition to paper and wood products recovered after use to make new products, other recovery and use has environmental and economic effects. These include recovery and burning of pulping liquor for energy (1.1 Quad in 1999, up from 0.7 Quad in 1972) and recovery of wood residue at wood and pulp products mills (92 million dry tons generated, 50 million tons used for products, 40 million tons used for energy, and 2 million tons unused in 1996.)